

Worksheet for Technical Review of Working Draft of Proposed Permit

Company Name:	Occidental Chemical Corporation	AI #:	1137	TEMPO Activity No:	PER20090011
Facility Name:	Taft Cogeneration Plant	Remarks Submitted by:		Mindi Faubion (Providence)	
Permit Writer:	Dustin Duhon	Permit Writer Email address:		dustin.duhon@la.gov	

Instructions

Permit Reference – Indicate specific portion(s) of the permit to which the remark relates (i.e. “Specific Condition 120”, or “Section II Air Permits Briefing Sheet”, etc.).

Remarks – Explain the basis for each remark. Provide regulatory citations where possible. If the remark is made due to an error or omission in the permit application this must be noted and the revised information **must be submitted**. Revised information may be submitted separately from this worksheet. Please be aware that revised information must be submitted in writing and certified by the Responsible Official, and if necessary, by a Professional Engineer licensed in Louisiana. *Please Note:* New or additional equipment, processes or operating conditions not addressed in the original permit application will be addressed on a case-by-case basis. The Department reserves the right to address such changes in a separate permit action.

DEQ Response – DO NOT COMPLETE THIS SECTION. This section will be completed by Air Permits Division of DEQ, included in the proposed permit package and made available for public review during any required public comment period.

- Additional rows may be added as necessary.
- Completed Form shall be emailed to the Permit writer in MS Word compatible format within the deadline specified in the email notification.

-DO NOT USE THIS FORM TO SUBMIT COMMENTS DURING THE OFFICIAL PUBLIC COMMENT PERIOD.

Permit Reference	Remarks	Air Permits Division Response (for official use only)
Specific Requirements Nos. 3, 55, and 107	REVISE. Add language: “In lieu of this, complies with (more stringent) Specific Requirement Nos.” 2, 54, and 106, respectively. Also, please add in statistical basis which is a 4-hour rolling average as specified in 60.334(j)(1)(iii)(A).	The requested statistical basis was added. No other changes were made because Specific Requirements Nos. 2, 54, and 106 are not more stringent in all cases. During Low Load conditions (30% < Load < 50%), the aforementioned specific requirements do not apply.
Specific Requirements NEW	ADD. Need to add a specific requirement which states that representative fuel sampling is conducted to demonstrate that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf (60.334(h)(3)) since the gaseous fuel meets the definition of natural gas. The statistical basis should be noted as “annually” as per section 2.3.1.4(e) of Appendix D to Part 75. Also, as per Section 2.3.1.4(c) of Appendix D to Part 75, “if several affected units are supplied by a common source of gaseous fuel, a single sampling result may be applied to all of the units, and it is not necessary to obtain a separate sample for each unit...”	This change was not made. This provision is already accounted for in Specific Requirements 6, 58, and 110, which states that sulfur fuel monitoring should be conducted except as provided for in 40 CFR 60.334(h)(3).

Specific Requirements Nos. 5,57, and 109	REMOVE. This facility does not use steam or water injection to control NOx and is therefore not subject to 40 CFR 60.334(a),(d), or (f). Therefore, this condition does not apply.	This change was made. <i>REMOVED</i>
Specific Requirements Nos. 6, 58, and 100	REMOVE. This condition does not apply. The facility is exempt under 40 CFR 60.334(h)(3) which states that a facility may elect not to monitor the total sulfur content of the fuel combusted in the turbine if the fuel is demonstrated to meet the definition of natural gas in 60.331(u). The facility demonstrates that the fuel meets the definition of natural gas by showing that the sulfur content of the fuel is <=20 gr/100scf using representative fuel sampling procedures specified in appendix D to part 75	This change was not made. This condition provides for applicability of 40 CFR 60.334(h)(3). Please see response to Comment #2 above for more details. <i>REMOVED</i>
Specific Requirements Nos. 7,59, and 111	REMOVE. The facility does not claim an allowance for fuel bound nitrogen; therefore, this condition does not apply.	This change was made. <i>REMOVED</i>
Specific Requirements Nos. 8,60, and 112	REMOVE. This facility does not use steam or water injection to control NOx; therefore, this condition does not apply.	This change was made. <i>REMOVED</i>
Specific Requirements Nos. 9,61, and 113	REMOVE. This facility does not combust any solid, liquid, or gaseous fuel.	This change was made. <i>REMOVED</i>
Requirements Nos. 21, 22, 23, 24, 27, 30, 34, 35, 42, 43, 51, 73, 74, 75, 76, 79, 82, 86, 87, 94, 95, 103, 125, 126, 127, 128, 131, 134, 138, 139, 146, 147, and 155	60.41Da defines <i>fossil fuel</i> as "natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such material for the purpose of creating useful heat." Furthermore, 60.41Da defines <i>gaseous fuel</i> as "any fuel derived from coal or petroleum that is present as a gas at standard conditions and includes, but is not limited to, refinery fuel gas, process gas, coke-oven gas, synthetic gas, and gasified coal." The only fossil fuel combusted in the duct burners is natural gas, which does not meet the definition of a gaseous fuel, as defined above. Therefore, all requirements in Subpart Da specifically related to the combustion of solid, liquid, or gaseous fuels (which includes all requirements under 60.42Da and 60.43Da as well as the subsequent compliance provisions under 60.48Da, the subsequent compliance determination procedures and methods under 60.50Da, and the subsequent reporting requirements under 60.51Da) do not apply to this facility.	This change was made. <i>REMOVED</i>

Specific Requirements Nos. 25, 77, and 129	REVISE. The statistical basis should be “Three one-hour test average” <u>not</u> “thirty-day rolling average”.	This change was made.
Specific Requirements Nos. 26, 78, and 130	60.44Da(d)(1) states that the NO _x limitation is <=1.6 lb/MWh (200 ng/J) gross energy output is based on a 30-day rolling average basis, except as provided under 60.48Da(k). 60.48Da(k) provides specific compliance provisions for duct burners subject to 60.44Da(d)(1) that allow for the facility to determine compliance with the applicable NO _x emission limitation in 60.44Da(d)(1) [the 1.6 lb/MWh (200 ng/J) gross energy output as stated above] based on the three-run average (nominal 1-hour runs) for the initial and subsequent performance tests [60.48Da(k)(1)(iv)]. REMOVE. The facility is not planning to demonstrate an emerging technology; therefore, this condition does not apply.	This change was made.
Specific Requirements Nos. 29, 81, and 133	REMOVE. The facility does not have a flue gas desulfurization system; therefore, this condition does not apply.	This change was made.
Specific Requirements Nos. 31, 36, 83, 88, 135, and 140	REMOVE. 60.48Da(e) and 60.48Da(i) do not apply to duct burners. Specific compliance provisions for duct burners are addressed in 60.48(k). Duct burners that are part of a combined cycle system may demonstrate compliance based on the three-run average one-hour tests for the initial and subsequent performance tests rather than a thirty-day rolling average, as per 60.48Da(k)(1)(iv).	This change was made.
Specific Requirements Nos. 32, 33, 46, 47, 48, 50, 84, 85, 98, 99, 100, 102, 136, 137, 150, 151, 152, and 154	REMOVE. These requirements do not apply to this facility for the reasons which follow: <u>NO_x:</u> As stated previously, specific compliance provisions for duct burners are addressed in 60.48(k) which specifies that duct burners that are part of a combined cycle system may demonstrate compliance based on the three-run average one-hour tests for the initial and subsequent performance tests rather than a thirty-day rolling average, as per 60.48Da(k)(1). Therefore, all testing and reporting requirements related to continuous daily monitoring do not apply.	This change was made.
	<u>SO₂:</u> As stated previously, the facility does not combust any solid, liquid, or gaseous fuel meeting the definitions in 60.41Da. The SO ₂ standards of 60.43Da are specific to the combustion of solid, liquid, or gaseous fuel; therefore the facility is not subject to 60.43Da nor the subsequent compliance provisions outlined in 60.48Da nor the subsequent reporting requirements outlined in 60.51Da.	

Specific Requirements Nos. 160, 164, and 169	<p>REVISE. This requirement is standard language; however, as written the second sentence, reads "The stack test's purpose is to demonstrate compliance with the emission limits of this permit..." which, taken verbatim indicates that stack testing is required for all emission limits within the permit. To clarify, we request that the first sentence be modified to read "Conduct a performance/emission test, as required: Due..."</p>	<p>In order to address the concerns of the commenter and LDEQ, the conditions have been changed to read as follows:</p> <p>Conduct a performance/emissions test: Due within 180 days after initial startup (or restart-up after modification), within 180 days of the issuance of this permit, or within 60 days after achieving normal production rate or end of the shutdown period, whichever is earliest. The stack test's purpose is to demonstrate compliance with the carbon monoxide emission limits of this permit for the sources covered by this process group and therefore must be conducted at greater than 80% of maximum permitted capacity. Test methods and procedures shall be in accordance with New Source Performance Standards, 40 CFR 60, Appendix A, Method 10 - Determination of Carbon Monoxide Emissions from Stationary Sources. Use alternate stack test methods only with the prior approval of the Office of Environmental Assessment. As required by LAC 33:III.913, provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits.</p>
Specific Requirements No. 183	<p>REVISE. This requirement is standard language from 75.10(b); however, for clarity, a note should be included at the end of this requirement which states that the facility is not required to install and record SO₂ CEMS data.</p>	<p>The following statement has been added to the end of this condition:</p> <p>"Sources at this facility are not currently required to install and operate SO₂ CEMS for these units in order to comply with 40 CFR 75."</p>
Specific Requirements No. 185	<p>REVISE. This requirement is standard language from 75.10(d); however, for clarity, a note should be included at the end of this requirement which states that the facility is not required to install and record COMS data.</p>	<p>The following statement has been added to the end of this condition:</p> <p>"Sources at this facility are not currently required to install and operate a COMS for these units in order to comply with 40 CFR 75."</p>
Specific Requirements No. 196	<p>REMOVE. The recordkeeping requirements for alternate operating scenarios should be removed since the startup/shutdown and low load operating scenarios are not true alternate operating scenarios. Operating at different loads are not changes in process or manufacturing conditions.</p>	<p>This change was not made. While changing from one scenario to another may not entail significant operational changes, it does involve the applicability of different emissions limitations. It is important to document the scenario under which the unit operates in order to determine the appropriate emission limitation.</p>
Specific Requirements No. 203	<p>REMOVE. The facility contains no sources which produce, handle, process, or store substances listed in LAC 5907.A Table A in quantities greater than the listed threshold. In addition, Table 2 of the draft permit lists LAC 33:III.5901.A as "does not apply", therefore it should not be listed as a specific requirement.</p>	<p>This change was made.</p>
Emission Rates for TAP/HAP & Other Pollutants	<p>REVISE. The Max lb/hr emission rates for SCN 0002, SCN 0003, and SCN 0004 for Sulfuric Acid are not included in this table. A value of 0.14 Max lb/hr should be listed for each as provided on the EIQs.</p>	<p>This change was made.</p>

Emission Rates for Criteria Pollutants	<p>REVISE. Please provide additional footnotes for all operating scenarios for clarification. For example, provide footnotes for SCN 0002 CO, NOx, and VOC Max lb/hr citing when this limitation applies (30% > loads <50%). Likewise, please add general footnotes for PCS 0001, 0002, and 0003 that states the emission rates for all criteria pollutants apply at loads $\geq 50\%$.</p> <p>In addition, please remove the maximum emission rates that are listed for CO and NOx for the combined cycle units (EQT 0003, EQT 0004, and EQT 0005). Emissions are continuously monitored from each GT/HRSG Unit not each turbine. These emission rates do not require continuous compliance demonstration and therefore should not be listed on the emission rates table.</p>	<p>However, for consistency on the various operating scenarios for the GT/HRSG Units, please fill in the table for all applicable pollutant for each source/scenario. For example, maximum emission rates for SUSD are provided for CO, NOx, and VOC but the emission rates for PM10 and SO₂ are not included.</p> <p>Also, the CO emission rates for EQT 0006 (4-99, Carbonation Tower) do not match what was provided on the EIQ. The correct emission limits are 1.29 lb/hr average, 1.54 lb/hr maximum, and 5.63 tons/year.</p> <p>An edited table attached for reference. Highlighted cells represent edited/added information.</p>	<p>REVISE. The permit application/EIQ submittal date was August 14, 2009.</p>	<p>REVISE. The permit application/EIQ submittal date was August 14, 2009.</p>	<p>REVISE. Include notes for ID Nos. EQT 0008, EQT 0009, and EQT 0010 that explains non-applicability of NSPS Subpart Da PM and SO₂ requirements. For each ID No. EQT 0008, EQT 0009, and EQT 0010 need to include the following in Table 2:</p> <p>An edited version of the table is attached for reference.</p> <p>Highlighted cells represent new inclusions.</p>
Statement of Basis, Section III, Application (page 2 of 6)	<p>Air Permit Briefing Sheet, Section II, Origin (page 1 of 7)</p>				
Air Permit Briefing Sheet, Table 2 – Explanation for Exemption or Non-Applicability of a Source (page 7 of 7)					

PSD Permit - Specific Conditions (page 9 of 11)	<p>REVISE. On the Maximum Allowable Emissions Rates table, for ID Nos. PCS 1, PCS 2, and PCS 3, for SU/SD operating mode (bottom line, top row), the VOC limit is incorrectly listed as 10.22 lb/hr. The VOC limit should agree with the limit in the Emission Rates for Criteria Pollutants table in the Title V permit which has the correct VOC limit of 23.70 lb/hr.</p>
PSD Permit – Briefing Sheet, Processing Time (page 4 of 11)	<p>In addition, on the same table, for ID No. EQT 6, the CO limits should be 1.54 lb/hr and 5.63 TPY as provided on the EIQ sheet submitted with the application.</p> <p>An edited version of the table is attached for reference.</p> <p>Highlighted cells represent edited/added information.</p>
PSD Permit – Briefing Sheet, Processing Time (page 4 of 11)	<p>REVISE. The permit application/EIQ submittal date was August 14, 2009.</p>
PSD Permit – Briefing Sheet (page 3 of 11)	<p>REVISE. The facility totals for CO are 1,817.63 tons/year. This is no change from previous facility totals. In the draft permit, the facility total CO is incorrectly listed at 1,813.20, corresponding to a -4.43 change.</p>
PSD Permit – Preliminary Determination Summary (page 5 of 11)	<p>REVISE. The facility totals for CO are 1,817.63 tons/year. This is no change from previous facility totals. In the draft permit, the facility total CO is incorrectly listed at 1,813.20, corresponding to a -4.43 change.</p>